Du'Bois J. Ferguson Remediation Manager

Schlumberger Oilfield Service 300 Schlumberger Drive Sugar Land, TX 77478 Tel: 281-285-3692

DFerguson3@slb.com

February 10, 2010

VIA FedEx Overnight

Section Chief
Environmental Enforcement Section
U.S. Department of Justice
PO Box 7611
Washington, DC 20044-7611

Craig Zeller
Remedial Project Manager
Superfund Division
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303

Re: DOJ Case No. 90-11-2-696/1

Subject: January 2010 Monthly Report

Sangamo Weston/Twelvemile Creek/Lake Hartwell Superfund Site

Natural Resources Trustees Consent Decree

#### **Dear Section Chief:**

In accordance with the Consent Decree and Section XIV of the Unilateral Administrative Order for the above referenced site, Schlumberger is required to submit Progress Reports on a quarterly basis. Given the current pace of activities, we will be submitting Progress Reports on a monthly basis until further notice.

In keeping with Paragraph 20 of the Consent Decree:

I certify that the information contained in or accompanying this submission is true, accurate and complete. This certification is based on my personal preparation, review, or analysis of the submission, and/or supervision of persons who, acting on my instructions, made the verification that the submitted information is true, accurate and complete.

If you have any questions, please do not hesitate to contact me at (281) 285-3692.

Sincerely,

J. J. Tayroon

DuBois J. Ferguson Remediation Manager



### U.S. EPA REGION IV

## SDMS

### POOR LEGIBILITY

PORTIONS OF THIS DOCUMENT MAY BE DIFFICULT TO VIEW DUE TO THE QUALITY OF THE ORIGINAL.

### TO MAKE THE DOCUMENT READABLE, TRY ONE OR MORE OF THE FOLLOWING:

#### From the Displays Settings in Windows Control Panel:

- 1. Set the Color Quality to the highest available: 24 bit or 36 bit.
- 2. Increase or decrease the Screen resolution.

#### From the Monitor/Display Controls:

- 1. For dark image page, increase the brightness and decrease the contrast.
- 2. For light image page, decrease the brightness and increase the contrast.

\*\* PLEASE CONTACT THE APPROPRIATE RECORDS CENTER TO VIEW THE MATERIAL \*\*

cc: Honorable G. Ross Anderson, Jr.
G. Ross Anderson, Jr. Federal Building and United States Courthouse
315 South McDuffie Street, 2nd Floor Anderson, SC 29624

Honorable William W. Wilkins Nexsen Pruet 55 E. Camperdown Way Suite 400 Greenville SC 29601

Leon C. Harmon Esq. Nexsen Pruet 55 E. Camperdown Way Suite 400 Greenville SC 29601

John Cresswell
Assistant Director
Division of Site Assessment and Remediation
Bureau of Land &Waste Management
SC Department of Health and
Environmental Control
2600 Bull Street
Columbia, SC 29201

Regional Solicitor's Office U.S. Department of the Interior Attn: Harriet M. Deal 75 Spring Street, SW Room 304 Atlanta, GA 30303

Diane Beeman
Ecological Services Office
U.S. Fish and Wildlife Service
176 Croghan Spur Road, Suite 200
Charleston, SC 29407

Paul League SC Department of Natural Resources Office of Chief Counsel 1000 Assembly Street Columbia, SC 29202

Anthony Rabern Georgia Department of Natural Resources 3695 Highway 197 Clarkesville, GA 30523 Office of the Attorney General Timothy J. Ritzka Assistant Attorney General 40 Capitol Square SW Atlanta, GA 30334

Jamie Sykes Richard B. Russell Project Office 4144 Russell Dam Drive Elberton, GA 30635

Frank S. Holleman III Wyche Burgess Freeman & Parham, P.A. 44 East Camperdown Way Greenville SC 29601-3591

Mr. Paul Doody ARCADIS 6723 Towpath Road Syracuse, NY 13214-0066

Mr. John N. Hanson Beveridge & Diamond, P.C. 1350 I Street, N.W. Suite 700 Washington, D.C. 20005-3311

# January 2010 Monthly Report Sangamo Weston/Twelvemile Creek/Lake Hartwell Superfund Site Operable Unit 2

#### **Activities Completed**

- Schlumberger's contractors continued earthwork related to the Sediment
  Management Unit (SMU) area, including completing construction of SMU perimeter
  drainage ditch and access road, grading of cushion sand material for liner subbase,
  and installing of the Geosynethic Clay Liner (GCL) and the High Density
  Polyethylene (HDPE) base liner.
- Schlumberger's contractor initiated and continued installation of SMU liquid collection system.
- Schlumberger's contractor initiated and completed excavation of the anchor trench, and continued subsequent backfilling of the anchor trench in areas of installed liner.
- Schlumberger's contractors initiated and continued construction of the Mechanically
   Stabilized Earth (MSE) wall in perimeter slope north of Sediment Basin #3.
- Schlumberger's contractors completed grading of the Water Treatment Pad (WTP), continued placement of geotextile and crushed stone on the WTP, and installed a rip-rap drainage ditch to Pond #5.
- Erosion and sediment controls are installed at the SMU site, including permanent and temporary ponds, a double row of silt fence around the entire site, in addition to waddles, haybales, check dams, and retention structures.
- Schlumberger's contractors continued hydro-seeding of perimeter slopes to establish vegetation and provide erosion control.
- During January, Envirocon initiated partial demobilization from the Site, and Weston Solutions initiated mobilization of dredging and water treatment equipment to the Site. Weekly coordination meetings were implemented with Schlumberger, ARCADIS, Envirocon, and Weston Solutions.
- On January 29, 2010, Schlumberger met in Greenville with the Special Receiver and the Trustees to present an overview of the status of the Restoration Project and the schedule for Phase 2 of the Project. The meeting concluded with a visit to the SMU site. A copy of that presentation is attached to this report.

#### Results of Sampling, Tests, and Other Data

 QA/QC testing is being conducted relative to the SMU construction. Copies are available onsite and results will be presented in the liner certification in February.

#### Plans, Reports, and Other Deliverables

Several post-closure deliverables related to the substantive regulatory requirements
for the work were developed for submittal to SCDHEC and Pickens County including
a Groundwater Monitoring Plan, a Closure/Post-Closure Operating and Maintenance
Plan, a Fill Progression Plan, and an addendum to the site Stormwater Pollution
Prevention Plan (SWPPP).

#### Work Planned for February 2010

- Continue construction of the SMU and complete construction of SMU liner and liquid collection system.
- Complete construction of Mechanically Stabilized Earth (MSE) wall in perimeter slope north of Sediment Basin #3.
- Construct staging areas and access roads for Ball's Beach and Woodside I Dam.
- Continue installation of water treatment system, and mobilize for dredging activities.
- Complete and distribute project status information to adjacent property owners as part of Schlumberger's community outreach program.
- Prepare for dredging of sediment from Twelvemile Creek.
- Complete submission of Financial Assurances package to EPA and SCDHEC.

### Problems Encountered, Anticipated Delays, Solutions During December 2009

Schlumberger is working expeditiously as directed by the court. Several rain/storm
events have occurred during this reporting period, and the weather continues to be a
challenge in meeting the project schedule milestones. Specifically, SMU subbase
materials and anchor trench materials saturated by rain events had to be removed
and replaced.

# Twelvemile Creek Restoration Project Status

Greenville, SC January 29, 2010



Schlumberger

### Agenda

- Safety Moment
- SMU Construction Status
- Dredging Plans
- Monitoring
- Outstanding Items
- Site Tour





Mobilization & Access Road



**Installing Erosion Controls** 



Clearing & Grubbing



**Wood Chipping** 



Earthwork & Stormwater Ponds



Subgrade Preparation



**GCL** Installation



**HDPE** Liner Installation



Liquid Collection Piping

### **SMU Construction Status**

#### Key construction milestones

- Mobilization began October 12, 2009
- Clearing October 16 to November 4, 2009
- Liner construction began January 2, 2010
- Expect liner completion early February
- Expect liquid collection system completion early February
- Ready to accept sediment mid-February

#### Key statistics

2/3/2010

- Over 20,000 hours worked without incident
- About 370,000 cubic yards of earth moved
- About 20,000 tons of material imported
- About 440,000 square feet of liner and GCL installed



### **SMU Construction Status**

- Challenges Overcome
  - Timber removal added to scope
  - Heavy rains
    - Total 15 days lost
    - Erosion controls held up well, typical repairs
    - Removed accumulated sediment, repaired and/or replaced fencing/bales
  - Lost 5 additional days to weather (Cold temperatures, high winds)
  - Condensed work schedule (1 shift)



### **Dredging Plans**

- Mobilization for dredging initiated this week
- Dredging support set up in February
  - Access area set up (Ball's Beach & WS I)
  - Dredge piping and booster pump installation
  - Water treatment system installation
  - Dredge mobilization
- Dredging start up March 1, 2010
  - Woodside I March through June
  - Woodside II April through September
- Dam removal following dredging
  - Woodside I remove in August/September
- Woodside II remove in
   September/October





Schlumberger

## **Monitoring Activities**

- Turbidity Monitoring
  - Monitoring buoys in 3 locations <u>Figure with locations</u>
  - Collect data (essentially continuous) and transmit to trailer
  - Compare upstream to downstream to 50 NTU limit
  - Supplement with operational monitoring at dredge locations
- Water treatment system discharge in accordance with DHEC reqts
- Post-dredge probing
  - Will verify completion in 500 foot segments as dredging progresses
  - Some concern with incoming sediment from upstream
- Need Easley Central to refrain from releasing sediment during dredging

## **Outstanding Items for Dredging**

- DHEC approvals for SMU material placement
  - Fill progression plan
  - GW Monitoring Plan
  - Post-closure Plan
- DHEC approval for water treatment system
- Pickens County SWPPP for access areas & in-river controls
- Wolfe Property access
- MOA for tailrace wall/SHPO